REPORTS - 5
COMMITTEES 2-18

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7 June 1965

MEMORANDUM FOR THE RECORD

SUBJECT: The NIS Gazetteer Program

1. From a small file of decisions made 30 years ago, the gazetteer program has grown to encompass more than 3 million foreign place names and more than 100 published gazetteers. The increasing demand for current foreign place names led to the introduction of punch cards to facilitate reproduction and revision. The card operation, however, required some hand alphabetizing and printed only upper case characters without diacritical marks. Studies were made by the Machine Division, OCR, and the former Automated Data Processing Staff, but each review foundered on the problem of diacritical marks. In the meantime, gazetteers of some critical areas became 10 or more years old and certain large mapping agencies were forced into creating place name units to keep abreast. The Agency now has the computers and a photo-lettering machine that together will improve the entire operation. All that is lacking is the connective systems that must be devised.

2. Last year, the undersigned and [redacted] of the Office of Computer Services, DD/S&T, visited the staff that serves the Interdepartmental Board of Geographic Names. This tour and subsequent conversations with Meredith Burrill, Al Belden, Ole Schelsnes, and Bill Beetschen (National Atlas) have convinced me that ADP could offer a great deal to the entire program. Specifically, three areas of possible automation exist in the current NIS Gazetteer effort-initial entry, alphabetizing, and reproduction. If the process were converted to ADP, three new by-products or processes are available - type printout for maps, gazetteer searches, and merging of classified place names. 25X1A9a

a. Initial entry

The early entry of data into digital form is demonstrated by the way names are handled in a system designed for the National Atlas. Handwritten names

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are typed onto cards and simultaneously punched paper tape is produced. This is processed by the computer into type for both the map and the index.

b. Alphabetizing

Final alphabetizing of the punch cards is now done by hand. The logic of alphabetizing could be programmed and the sequencing handled entirely by computer.

c. Reproduction

Once entered, a new gazetteer could be recalled from digital storage and printed out by the line printer. Periodic publication could be achieved by magnetic tape driving the photo-lettering machine.

d. Type Printout for Maps

One major bonus to be derived from the placement of place names into digital form would be the potential recall of type set automatically for use on maps and in map indexes as outlined in the paper, "GEONYM - A Unified Approach to Handling Geographic Names in Cartography."

e. Gazetteer Searches

Properly organized, the master file could be rapidly searched to retrieve names answering geographic, generic, demographic, or even phonetic criteria.

f. Merging of Classified Place Names

Copies of the files stored on magnetic tape could be readily expanded to include classified names such as those produced by this Agency and NSA. Of course, this would be under secure conditions and would utilize copies (not originals) of the master files.

3. How can the problem of redesigning gazetteer production flow be approached and just who should tackle it? The textbook approach to similar problems begins with a preliminary study followed by feasibility and application studies and ends with conversion planning, testing, and initiation. The following program of specific action is recommended.

a. Preliminary Study Group

This would be a small, high-level committee whose duty would be to survey the problem briefly and recommend for or against the organization of a feasibility study. A written report should be written within a prescribed time limit of 2 weeks to 2 months. Possible participants might be [redacted] 25X1A 25X1A9a [redacted] (Chief, Applications Division, OCS). 25X1A9a

b. Feasibility Study Group

This committee normally would be composed of subject-matter specialists. Like the preliminary group, it also would need a charter and a deadline for its completed report. Members might be drawn from BGN, OCS, the current OBI, D/GC, and MD/OCR. The feasibility and application studies could be combined.

c. Application Study Group

This would be a working-level group that might have some of the same men as the feasibility study committee and should have more electronic data processing specialists. The group's function would be to redesign the system and establish the specifications for systems, equipment, and personnel. The exact composition, charter, and deadline for this group should be left to the judgment of the preceding group.

d. Conversion Planning, Testing, and System Initiation

The subsequent phases are best left to the recommendations of the application study group.

5. The Agency is completely involved in the gazetter program - as a financial contributor, participant, scheduler, processor, publisher, and consumer. The forthcoming restructuring of the Office of Basic Intelligence will offer a unique opportunity to participate in the badly-needed redesign of gazetteer production flow. The purpose of this proposal is to stimulate discussion that will lead to a more effective program.

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